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**PATENT** 

JAN 1 1 2007

Atty Docket No.: 100201439-1 App. Ser. No.: 10/681,556

#### REMARKS

Favorable reconsideration of this application is respectfully requested in view of the amendments above and the following remarks. Claims 1-2 and 4-24 are pending of which claims 1, 9, 15, and 21 are independent. Claims 1-2, 9, 15, and 21-23 have been amended. Claim 3 has been cancelled. Support for the amendments may be found in original claims 2-3 and Figure 3.

Claims 7 and 14 were objected because of an alleged lack of antecedent basis for a number of terms.

Claims 10 and 15 were rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter.

Claims 1-17 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite.

Claims 1, 4, 5, 8-12, 15, and 17 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shmuel Ur et al. (20030110474) in view of Cahill et al. ("The Java metrics Reporter – An Extensible Tool for OO Software Analysis," 2002, IEEE) and further in view of Benlarbi et al. ("Polymorphism Measures for Early Risk Prediction", 1999, ACM).

Claims 6 and 13 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shmuel Ur et al. in view of Cahill et al., Benlarbi et al., and further in view of Ball ("The Concept of Dynamic Analysis," Bell Laboratories Lucent Technologies, 1999).

The above objection and rejections are respectfully traversed for the reasons stated below.

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**Drawings** 

The Office Action failed to indicate whether the drawings as originally filed on October 8, 2003 are acceptable. Therefore, it is respectfully requested that the PTO provide

an indication as to the status of the originally filed drawings.

Objection to the Claims

Claims 7 and 14 were objected because of an alleged lack of antecedent basis for each of the terms "each public function" and "all remaining public and private functions." Claims 7 and 14 have been amended to indicate that such claimed functions are in the system classes. Accordingly, it is respectfully submitted that proper antecedent bases for the aforementioned

terms, and withdrawal of the claim object is respectfully requested.

Claim Rejections Under 35 U.S.C. §101

Claims 10 and 15 were rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Particularly, Claims 10 and 15 were rejected because the claimed "software having machine readable code" is allegedly directed to a functional descriptive material not embedded in a machine-readable media, and the specification allegedly provides no explicit and deliberate definition of both "examining an application

software" and "producing a result" as recited in Claim 10.

Claim 10 has been amended to now recite "A machine-readable medium on which is encoded machine readable code for testing object-oriented system software having system classes...." Also, the phrase "producing a result" has been removed from Claim 10. Furthermore, it is respectfully submitted that those terms in the phrase "examining an

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application software" of Claim 10 have well recognized meanings, which allow the reader to infer the meaning of the entire phrase with reasonable confidence.

Claim 15 has been amended to now recite "A machine-readable medium on which is encoded a software tester program code, the software tester program code comprising:..."

Support for the amended language in Claims 10 and 15 is inherently found in at least paragraphs [0008] and [0009] of the originally-filed disclosure (as paragraph numbered in its publication 2005/0081106). This is because, as understood in the art, any software program must be stored in a machine-readable medium in order to be read by an executing machine to implement applications provided by such a software program.

Accordingly, it is respectfully submitted that Claims 10 and 15 provide machinereadable media as required by the Office Action, and withdrawal of the aforementioned rejection of these claims is respectfully requested.

## Claim Rejections Under 35 U.S.C. §112, second paragraph

Claims 1, 15, and 17 were rejected as allegedly being indefinite because "it is not clearly understood what the specifics, the purpose, and the goals of the examining process."

Office Action, p. 3. It is respectfully submitted that breadth of a claim is not to be equated with indefiniteness. If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph. MPEP 2173.04. Indeed, the phrase "examining an application software program" is clear because the components of such a phrase have well recognized meanings, which allow the reader to infer the meaning of the entire phrase with reasonable confidence.

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Furthermore, Claims 1, 15, and 17 have been amended to indicate that the subsequent "determining a static use count" and "deriving a dynamic use count" are performed from examining the application software program. Thus, the purpose of the examining process is clear. Accordingly, withdrawal of the aforementioned rejection of Claims 1, 15, and 17 is respectfully requested.

Claim 10 was rejected as allegedly being indefinite because of the limitation
"software for testing object-oriented system software." This rejection is most because Claim
10 has been amended to remove such a limitation. Accordingly, withdrawal of the rejection
of Claim 10 is respectfully requested.

Withdrawal of the rejection of Claims 2-9, 11-14, and 16 based on the aforementioned rejections of their independent claims 1, 15, and 17 is also respectfully requested in light of the definiteness of the now amended claims 1, 15, and 17.

### Claim Rejections Under 35 U.S.C. §103(a)

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in MPEP § 706,02(j):

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

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Therefore, if the above-identified criteria are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

Claims 1, 4, 5, 8-12, 15, and 17 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shmuel Ur et al. (20030110474) in view of Cahill et al. ("The Java metrics Reporter – An Extensible Tool for OO Software Analysis," 2002, IEEE) and further in view of Benlarbi et al. ("Polymorphism Measures for Early Risk Prediction", 1999, ACM).

Claims 6 and 13 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shmuel Ur et al. in view of Cahill et al., Benlarbi et al., and further in view of Ball ("The Concept of Dynamic Analysis," Bell Laboratories Lucent Technologies, 1999).

## Independent Claims 1, 10, 15, and 17

Independent claims 1, 10, 15, and 17 all recite,

determining a static use count of said system classes...;
deriving a dynamic use count of each of said system classes...;
assigning a proportional weighing attribute to each system class based on its
corresponding static use count and dynamic use count....

The Office Action admitted that Shmuel Ur et al. does not disclose these claimed features.

Office Action, p. 5. However, the Office Action attempted to cure these defects by alleging that Cahill et al. discloses such claimed features in its Section 3.1 through 3.5. Id. It is respectfully submitted that Cahill et al. is directed to a Java Metrics Reporter (JMR) used for software analysis to determine the complexity of a software. To that effect, the JMR employs a number of pre-selected metrics for measuring software complexity, such as the Basic metrics, complexity metrics, inheritance metrics, and polymorphism metrics, as stated in Section 3.1 and cited by the Office Action. However, Cahill et al. provides no discussion

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regarding a reliance on a determined static use count of system classes and derived dynamic use count of each of the system classes in order to assign a proportional weighing attribute to each system class. At best, Cahill et al. mentions the use of a complexity metric called "weighted methods per class (WMC)" in Section 3.3. However, that metric is for measuring the sum of complexities of all methods of a class, and not for determining or deriving the static and dynamic use counts of the system classes as claimed, nor for assigning a proportional weighing attribute to each system class based on such counts.

It is respectfully submitted that neither Benlarbi et al. nor Ball cures the aforementioned defects found in Shmuel Ur et al. or Cahill et al. Indeed, Benlarbi et al. discusses the use of polymorphism measures for early risk prediction with no mention of any determination or derivation of both static and dynamic use counts of system classes and assignment of a proportional weighing attribute to the system classes based on such counts. Likewise, Ball discusses the concept of only dynamic analysis with no mention of any determination or derivation of both static and dynamic use counts of system classes and assignment of a proportional weighing attribute to the system classes based on such counts.

Accordingly, it is respectfully submitted that the Office Action failed to establish a prima facic case of obviousness against Claims 1-7. Withdrawal of the rejection of these claims and their allowance are therefore respectfully requested.

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### Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are carnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

Dated: January 11, 2007

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